
STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY)
)
Petition for expedited approval of implementation)
of a market-based alternative tariff, to become)
effective on or before May 1, 2000,)
pursuant to Article IX and Section 16-112)
of the Public Utilities Act.)

Docket No.

DIRECT TESTIMONY OF PAUL R. CRUMRINE
DIRECTOR, ACCESS IMPLEMENTATION
COMMONWEALTH EDISON COMPANY

March 31, 2000

OFFICIAL FILE
ILL. C.A. DOCKET NO. 00-0253/0395/0461
Per Fed Exhibit No. 7
Witness _____
Date 10-5-00 Reporter *Lee*

1 **Q. Please state your name and business address.**

2 A. My name is Paul R. Crumrine. My business address is 10 South Dearborn, 35th Floor,
3 Chicago, Illinois 60603.

4
5 **Q. By whom are you are you employed and what is your title?**

6 A. I am employed by Commonwealth Edison Company ("ComEd") as Director, Access
7 Implementation.

8
9 **Q. Please describe your educational background and experience.**

10 A. I have a Bachelor of Science degree in Mathematics and a Master of Science degree in
11 Management from Purdue University. In the position of Director, Access
12 Implementation, I have managerial responsibilities for the development of ComEd's
13 delivery services tariffs and other tariffs necessary to successfully implement open access
14 in the ComEd system. This includes the power purchase option and customer transition
15 charge tariffs that incorporate the market value calculated by the Neutral Fact Finder
16 (NFF) and that were approved by the Illinois Commerce Commission ("the
17 Commission") in August of last year.

18
19 From February 1994 to March 1998 I served as ComEd's Director of Rates. Prior to
20 February 1994, I served as ComEd's Director of Strategic Analysis. In that position I
21 was responsible for directing ComEd's load forecasting, class load, and economic
22 analyses. Before that I was ComEd's Senior System Rate Economist responsible for the

1 preparation and analysis of ComEd's marginal cost-of-service study. I was also involved
2 in work related to rate design.

3
4 Prior to becoming ComEd's Senior System Rate Economist I held a staff position in the
5 Strategic Analysis Department as a member of the load forecasting staff with
6 responsibilities for econometric and time-series forecasting, as well as related statistical
7 research projects. In addition, I have been employed as a computer analyst at ComEd's
8 Bulk Power Operations Office as well as the Mid-America Interconnected Network
9 Headquarters.

10
11 **Q. Please describe your current duties and responsibilities.**

12 **A.** In the position of Director, Access Implementation, I have managerial responsibilities
13 related to the development of the business processes necessary to successfully implement
14 open access in the ComEd system. These responsibilities include the development of
15 delivery services tariffs, billing and pricing experiments, contracts and other tariffs
16 required by the new restructuring legislation in Illinois and other business needs. In
17 addition, I manage and integrate the efforts of ComEd's subject area implementation
18 teams to ensure conformance with internal, legal and regulatory time lines and goals.

19
20 **Q. What is the purpose of your testimony in this proceeding?**

21 **A.** The purpose of my testimony is to describe the structure of ComEd's proposed power
22 purchase option tariff in which the determination of the market value for electric power
23 and energy is a function of market indices. The name of this new tariff is Rider PPO –
24 Power Purchase Option (Market Index). I refer to this tariff throughout my testimony as

1 Rider PPO MI. Rider PPO MI is attached to ComEd's petition as Exhibit B,
2 Attachment 1.

3
4 In addition, I will describe the method by which ComEd proposes to transition from a
5 regime in which the market value for power and energy and associated customer
6 transition charges ("CTCs") are determined under Rider PPO – Power Purchase Option
7 (Neutral Fact Finder) ("Rider PPO NFF") to one in which they are determined under
8 Rider PPO MI. As a result of this transition process, ComEd is proposing changes to the
9 existing Rider PPO NFF and Rate CTC – Customer Transition Charge ("Rate CTC")
10 tariffs that are necessary to effect this transition process. The tariff sheets containing the
11 revisions shown in legislative style for Rider PPO NFF and Rate CTC are attached to
12 ComEd's petition as Exhibit B, Attachments 2 and 3, respectively.

13
14 **Q. Please describe the structure of Rider PPO—Power Purchase Option (Market**
15 **Index).**

16 **A.** Rider PPO MI includes the terms and conditions under which ComEd proposes to
17 provide electric power and energy supply services to its nonresidential retail delivery
18 service customers in accordance with Section 16-110 of the Public Utilities Act ("the
19 Act"). Rider PPO MI determines the market value for electric power and energy as a
20 function of market indices specified in the tariff. The market values for each customer
21 class would also be utilized to determine the appropriate CTCs for each customer class or
22 on an individual basis for those customers for which a customer-specific CTC is
23 determined.

1
2 Rider PPO MI would be available only to those nonresidential retail customers that are
3 eligible for and are taking service under ComEd's delivery service tariff, known as Rate
4 RCDS – Retail Customer Delivery Service – Nonresidential ("Rate RCDS"). Moreover,
5 customers taking service under Rider PPO MI would only be able to purchase from
6 ComEd an amount of electric power and energy that is equal to or less than the amounts
7 delivered under Rate RCDS.

8
9 The charges contained in Rider PPO MI are intended to appropriately recover the costs of
10 providing electric power and energy supply services from those retail delivery services
11 customers for which ComEd is providing these services. Rider PPO MI includes
12 formulae that are used to determine Market Value Energy Charges ("MVECs") for
13 specified periods of time. These per kilowatt-hour charges are market-based prices for
14 energy developed in accordance with Section 16-112 of the Act. The market values
15 contained in Rider PPO MI are a function of market indices. ComEd proposes that the
16 market indices utilized to determine market values be a combination of monthly forward
17 prices from Altrade™ and Bloomberg Power Match reporting services for peak hours
18 ("Peak Index") and average monthly historical prices from Power Markets Week's *Daily*
19 *Price Report* for off-peak hours ("Off-peak Index"). These market indices for electricity
20 are desirable for use in the determination of the MVECs because they are available,
21 published prices that can be tracked and analyzed over time. For an explanation of the
22 appropriateness of the market indices upon which the market values are based, and a

1 complete description of the method by which these market indices are derived from the
2 source data, see the testimony of Mr. David E. Nichols.

3
4 **Q. How does ComEd propose to use these market indices to determine market values**
5 **that are appropriate for ComEd's nonresidential customer classes?**

6 A. The market indices are used as a starting point. They would be used in combination with
7 hourly 1999 Locational Marginal Price data from the PJM Interconnection, L.L.C.,
8 Western Hub ("PJM-West") and hourly 1999 loads for each of ComEd's delivery service
9 customer classes to determine a load-weighted set of MVECs that include an adjustment
10 for price shape. Adjustments will also be made to correctly reflect losses on the
11 transmission and distribution systems.

12
13 **Q. Please describe how ComEd proposes to utilize 1999 Locational Marginal Prices**
14 **from PJM-West.**

15 A. PJM-West price data are available for each hour and reflect the market clearing price for
16 that hub. These hourly prices are not being used to determine the prices in Illinois, but
17 only to determine the price shape that reflects the fluctuation in prices during the day.
18 There already exist hourly PJM-West price data for the 8760 hours in 1999.

19
20 For each month in 1999, two scalars are determined. The first monthly scalar ("Peak
21 Scalar") is the ratio of the Peak Index for that month and the simple average of the hourly
22 PJM-West prices in the same month for the hours from 6:00 a.m. to 10:00 p.m. from
23 Monday through Friday, exclusive of North American Electric Reliability Council

1 ("NERC") holidays. The second scalar ("Off-peak Scalar") is the ratio of the Off-peak
2 Index for that month and the simple average of the hourly PJM-West prices in the same
3 month for the hours from 12:00 a.m. to 6:00 a.m. and from 10:00 p.m. to 12:00 a.m. from
4 Monday through Friday exclusive of NERC holidays. For each month in 1999, each of
5 the 8760 hourly PJM-West prices is multiplied by one of these two scalars. Hourly prices
6 for each month for the hours from 6:00 a.m. to 10:00 p.m. from Monday through Friday
7 exclusive of NERC holidays are multiplied by the respective Peak Scalar for that month.
8 All other hours in each month are multiplied by the respective Off-peak Scalar for that
9 month. At this point, the twelve values for the Peak Index and the twelve values for the
10 Off-peak Index have been expanded and shaped into 8760 hourly prices based on the
11 hourly shape of prices from the 1999 PJM-West price data.

12
13 **Q. Please describe the process by which these 8760 hourly values are used to determine**
14 **the market value applicable for each of ComEd's delivery service customer classes.**

15 **A.** The next steps are repeated for each of the fifteen nonresidential delivery service
16 customer classes.

17
18 First, the effect of losses on the transmission and distribution systems is accounted for by
19 increasing the hourly price values. The 8760 hourly values are increased to account for
20 system energy losses on the transmission system as specified in ComEd's Open Access
21 Transmission Tariff ("OATT"). Each hourly value is also increased by one of the two
22 monthly distribution loss factors applicable to that customer class. The appropriate
23 distribution loss factor is either the peak period loss factor or the off-peak period loss

1 factor, based on the definition of peak and off-peak energy periods contained in ComEd's
2 retail tariffs.

3
4 Next, the hourly price values (after this adjustment for transmission and distribution
5 losses) are load-weighted by multiplying each hourly value times the corresponding class
6 hourly load from 1999. The hourly results of this multiplication are then summed for
7 each of four time periods and divided by the sum of class loads for the corresponding
8 hours to determine the seasonal time of use MVECs for that customer class. The four
9 time periods are: Summer Peak and Off-Peak and Nonsummer Peak and Off-Peak. The
10 Summer period in the calculation encompasses the months of June, July, August and
11 September, while the Nonsummer period contains the eight other months. The peak
12 period is defined as 9:00 a.m. through 10:00 p.m., Monday through Friday excluding
13 certain holidays, and the off-peak period is defined as all other hours. This is the same
14 definition of peak and off-peak that is contained in ComEd's retail tariffs for energy
15 consumption.

16
17 Likewise, seasonal non-time of use MVECs are determined for each of the two seasons
18 for each customer class by performing the operation using all hours in each season. In
19 addition, a single Load Weighted Average Market Value ("LWAMV") is determined for
20 each customer class by performing the operation using all of the hours in the year.

1 All MVECs and the LWAMVs include the adjustment for sales and marketing costs and
2 the adjustment for uncollectibles for each customer class as directed by the Commission
3 in its Order in Docket No. 99-0117.

4
5 The end result of this process is the determination of market values for each customer
6 class in which the hours of highest expected prices are weighted by the usage in those
7 same hours, providing the greatest possible amount of load weighting to the prices shaped
8 by the PJM-West price shape. The MVECs, LWAMVs, and associated CTCs for each
9 customer class under the new Rider PPO MI are shown in Exhibit B, Attachment 4
10 attached to ComEd's petition. For comparison purposes, the MVECs, LWAMVs, and
11 associated CTCs for each customer class under the existing Rider PPO NFF are shown in
12 Exhibit B, Attachment 5 attached to ComEd's petition.

13
14 **Q. You have testified that ComEd will use calendar year 1999 information for PJM-**
15 **West prices with ComEd customer class hourly loads for the same time period to**
16 **determine market values for Applicable Periods A and B in the year 2000. What**
17 **will happen next year?**

18 **A.** In each calendar year, ComEd will determine market values for the two Applicable
19 Periods using PJM-West prices and hourly customer class loads for the prior calendar
20 year. For example, when setting prices next year on April 1, 2001 and July 1, 2001
21 prices and hourly class loads for calendar year 2000 will be employed.

1 **Q. What provisions govern the charges customers would pay under Rider PPO MI?**

2 **A. As a result of this entire process, Market Value Energy Charges are differentiated by**
3 customer class and would be applied on a monthly basis to all the kilowatt-hours supplied
4 by ComEd to the retail customers served under Rider PPO MI. As defined in the tariff,
5 the seasonal time of use MVECs apply to certain customer classes based on ComEd's
6 retail definition of peak and off-peak periods. For other customer classes, absent an
7 election by the customer to select billing under the time of use MVECs, the seasonal non-
8 time of use charges are applicable to all kilowatt-hours supplied.

9
10 In addition, through the interaction between Rider PPO MI and ComEd's delivery service
11 tariff, retail customers taking service under Rider PPO MI will pay ComEd charges
12 related to the provision of transmission services and ancillary transmission services.
13 These charges allow ComEd to recover the costs it incurs in utilizing its transmission
14 system to transmit the electric power and energy supply services it is providing to the
15 retail customers taking service under Rider PPO MI. Retail customers taking service
16 under Rider PPO MI pay for transmission service and ancillary transmission services on a
17 per kilowatt-hour basis at the rates and under the terms and conditions detailed in
18 ComEd's OATT on file with the Federal Energy Regulatory Commission. This charge
19 per customer class is identical to the existing charge in Rider PPO NFF.

20
21 Rider PPO MI also includes an administrative charge to recover the costs of setting up
22 and administering the rate. This charge per customer class is identical to the existing

1 charge in Rider PPO NFF. Late payment charges and CTCs also apply. There are
2 additional terms and conditions detailed in the tariff as well.
3

4 **Q. Please describe the timing at which ComEd will determine MVECs and LWAMVs**
5 **under Rider PPO MI and associated CTCs.**

6 A. ComEd will determine MVECs, LWAMVs, and associated CTCs twice each year. There
7 will be two separate periods for each year, Applicable Period A and Applicable Period B.
8

9 Applicable Period A will cover a twelve month period starting with the June billing
10 month and continuing through the following May billing month. Applicable Period B
11 will cover a nine month period starting with the September billing month and continuing
12 through the following May billing month.
13

14 Beginning with the initial effective date of Rider PPO MI, customers that commence to
15 take delivery services in the billing months of May, June, or July (i.e., first bills in the
16 June, July, or August billing months) would pay CTCs determined for Applicable
17 Period A. Such customers would then be subject to CTCs determined for each
18 subsequent Applicable Period A as long as the customers continue to receive delivery
19 service.
20

21 Beginning with the initial effective date of Rider PPO MI, customers that commence to
22 take delivery services in the billing months of August through April (i.e., first bills in the
23 September through May billing months) would pay CTCs determined for Applicable

1 Period B. At the end of that period, such customers will then be subject to CTCs
2 determined for each subsequent Applicable Period A as long as the customers continue to
3 receive delivery service.

4
5 The updated MVECs, LWAMVs, and CTCs will be filed with the Commission for
6 informational purposes on the first business day on or after April 1st for Applicable
7 Periods A and the first business day on or after July 1st for Applicable Periods B. The
8 MVECs, LWAMVs, and associated CTCs for each customer class submitted in Exhibit
9 B, Attachment 4 attached to ComEd's petition would be the actual MVECs, LWAMVs,
10 and associated CTCs for each customer class to be used during the first Applicable
11 Period A beginning in 2000.

12
13 **Q. When does ComEd propose that Rider PPO MI become effective?**

14 A. ComEd proposes that Rider PPO MI become effective on May 1, 2000. An effective date
15 of May 1 will allow the terms of the rider and the associated CTCs to apply for the entire
16 June 2000 billing period which begins for certain customers as early as May 1 based on
17 ComEd's meter reading schedule.

18
19 **Q. How does ComEd propose to transition from the regime in which market values and**
20 **associated transition charges are determined under the NFF to one in which they**
21 **are determined by market indices under Rider PPO MI?**

22 A. ComEd is proposing a workable transition from one regime to the other. The most
23 critical aspect of the transition is that each delivery service customer must fall clearly into

1 one regime or the other. The mixing of MVECs from one regime with CTCs from
2 another would be inappropriate. ComEd's proposal accomplishes this objective.

3
4 As of the effective date of Rider PPO MI (proposed as May 1, 2000), all customers that
5 commence to take delivery services under Rate RCDS will be subject to the new CTCs
6 determined in accordance with the terms of Rider PPO MI. Likewise, Rider PPO MI will
7 be the only power purchase option for such customers to obtain electric power and energy
8 supply service from ComEd. Additionally, after the initial effective date of Rider PPO
9 MI, no new customers will be permitted to initiate service under Rider PPO NFF.

10
11 **Q. Your previous answer describes the way in which new delivery service customers**
12 **will be handled. What options does ComEd propose to extend to customers that are**
13 **already taking delivery service?**

14 **A.** There are two categories of customers that are currently taking delivery service: 1) those
15 that are obtaining their electric power and energy supply service from ComEd under
16 Rider PPO NFF and 2) those that are obtaining their electric power and energy supply
17 service from a Retail Electric Supplier ("RES"). The options available to these groups of
18 customers are slightly different. During the 45-day period beginning with the effective
19 date of Rider PPO MI, both groups of customers will be given a one-time opportunity to
20 exercise their options.

1 **Q. What are the options available to customers that are currently obtaining their**
2 **electric power and energy supply service from ComEd under Rider PPO NFF?**

3 **A. Customers taking service under Rider PPO NFF prior to the effective date of the new**
4 **Rider PPO MI will have two options:**

- 5 1. Choose to transfer to service under the new Rider PPO MI.
- 6 2. Choose to remain on their existing Rider PPO NFF contract. This is the default
- 7 option, in that customers that express no preference will remain on this option.

8
9 **Q. Please describe the process by which a customer on an existing Rider PPO NFF**
10 **contract may elect to transfer to a new Rider PPO (Market Index) contract.**

11 **A. During the 45-day window, customers currently taking service under Rider PPO NFF**
12 **may choose to terminate service under Rider PPO NFF and simultaneously begin a new**
13 **contract under the new Rider PPO MI effective with the beginning of the customer's next**
14 **monthly billing period. At that point, customers that choose to move to the new tariff**
15 **will be subject to the MVECs contained in Rider PPO MI for Applicable Period A and**
16 **also be charged the associated CTCs determined in accordance with Rider PPO MI. The**
17 **customer's new contract term will also be determined in accordance with the terms of**
18 **Rider PPO MI. If customers currently taking service under Rider PPO NFF do not make**
19 **an affirmative statement to ComEd indicating a desire to switch to the new tariff, they**
20 **will remain on Rider PPO NFF for the remainder of their contract term.**

1 **Q. Please describe what will happen if an existing PPO (NFF) customer chooses to**
2 **stay on the PPO (NFF) contract.**

3 **A. For customers that choose to remain on Rider PPO NFF, ComEd will honor the existing**
4 **contract through its existing expiration date. Such customers will continue to be subject**
5 **to the MVECs and associated CTCs based on the Neutral Fact Finder process through the**
6 **December 2000 monthly billing period. For customers whose contract terms extend**
7 **beyond December 2000, beginning with the January 2001 monthly billing period and**
8 **continuing through the end of the customer's contract term, the MVECs and associated**
9 **CTCs will be identical to the values for Applicable Period B under Rider PPO MI. The**
10 **customer will have the opportunity to terminate service under ComEd's power purchase**
11 **option by giving ComEd notice 30 days prior to the expiration of its existing contract.**
12 **Absent such notice, the customer will be transferred to service under the new Rider PPO**
13 **MI at the expiration of the contract term. That is, any renewals will be subject to**
14 **Rider PPO MI.**

15
16 **Q. Should the Commission approve ComEd's proposal, what would happen in the**
17 **event that, just prior to the Commission's approval, a DASR is submitted for a**
18 **customer to switch to the PPO for service to begin just after the Commission's**
19 **approval?**

20 **A. In that event, the customer would only be allowed to initiate service under Rider PPO MI.**
21 **However, in the rare case that such a situation may occur and should the customer desire,**
22 **ComEd would work with the customer to rescind the DASR prior to the initiation of**
23 **service. It is not ComEd's intent or desire to require a customer to take service under**

1 Rider PPO MI if the customer's decision to elect ComEd's power purchase option was
2 based on the pricing in Rider PPO NFF and the associated CTCs. ComEd clearly
3 understands that a customer should not be caught in a timing issue at the very moment of
4 transition. Consequently, ComEd will work closely with its customers to preclude such
5 situations or rectify them if necessary.

6
7 **Q. What are the options that will be open to delivery service customers that are taking**
8 **electric power and energy supply service from a RES rather than taking that service**
9 **from ComEd under Rider PPO NFF?**

10 **A.** Customers taking electric power and energy supply service from a RES prior to the
11 effective date of the new Rider PPO MI will have two options available:

- 12 1. Choose to move to the new regime and pay CTCs that are based on the new
13 Rider PPO MI.
- 14 2. Continue to pay CTCs that are based on the current Rider PPO NFF. This is the
15 default option.

16
17 **Q. How will such customers be able to select the first option and move to the new**
18 **regime?**

19 **A.** During the 45-day window, such customers will be able to affirmatively indicate to
20 ComEd that they desire to continue to purchase electric power and energy from their
21 RES, but be switched to CTCs based on the new Rider PPO MI effective with the
22 beginning of the customer's next monthly billing period.

1 **Q. What will happen in the absence of an affirmative indication from a RES customer**
2 **that it desires to choose the first option?**

3 A. In the absence of such an indication, the customer will remain subject to the CTCs
4 associated with Rider PPO NFF through the December 2000 monthly billing period.
5 Beginning with the January 2001 monthly billing period, the customer will be subject to
6 the CTCs determined for Applicable Period B in accordance with the new Rider PPO MI.

7
8 **Q. When does the transition period from the old regime to the new regime end?**

9 A. Beginning with the January 2001 monthly billing period, all delivery service customers
10 will be subject to CTCs determined under Rider PPO MI.

11
12 **Q. Besides the proposal for the new Rider PPO MI, how does ComEd propose to**
13 **incorporate the various customer options into its tariffs?**

14 A. The changes described above necessitate modifications to the language in the existing
15 Rider PPO NFF as well as Rate CTC. ComEd has developed specific language
16 implementing those changes. The new language is shown in legislative style in both
17 tariffs in Exhibit B, Attachment 2 and 3, respectively, attached ComEd's petition.

18
19 **Q. When does ComEd propose that the changes to Rider PPO NFF and Rate CTC**
20 **become effective?**

21 A. ComEd proposes that the changes become effective on May 1, 2000 simultaneous with
22 the effectiveness of Rider PPO MI.

1 Q. Does this conclude your direct testimony?

2 A. Yes.

3

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STATE OF ILLINOIS

COUNTY OF COOK

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VERIFICATION

My name is Paul R. Crumrine. I hold the position of Director, Access Implementation at Commonwealth Edison Company. I have reviewed my testimony attached to the foregoing Petition for Expedited Approval of a Market-Based Alternative Tariff submitted on behalf of Commonwealth Edison Company. I am familiar with the matters stated therein, and the factual statements contained therein are true and correct to the best of my knowledge and belief.

Paul R. Crumrine

Paul R. Crumrine
Director, Access Implementation
Commonwealth Edison Company

SUBSCRIBED AND SWORN
before me this 30th day
of March, 2000.


NOTARY PUBLIC

